

(57) **Abstract:** The present invention refers to an airborne radar device (1) comprising at least two antennas (2, 3) and clutter suppressing means (4). The radar device is arranged, via the antennas (2, 3) to send out radar pulses focused in main lobes (5) and the antennas are arranged to receive reflecting pulses. The antennas (2, 3) are separated from each other vertically. The radar device (1) comprises means (6) for transforming the received radar pulses into complex video signals in the form sequences of range bins (R_k). The video signals are represented in a first channel (K_1) and a second channel (K_2).